
Sequence Listing was accepted.

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Reviewer: Keisha Douglas

Timestamp: [year=2008; month=6; day=20; hr=11; min=14; sec=55; ms=713;]

Validated By CRFValidator v 1.0.3

Application No: 10540612 Version No: 2.0

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Output Set:

Started: 2008-05-30 13:46:50.561 **Finished:** 2008-05-30 13:46:52.292

Elapsed: 0 hr(s) 0 min(s) 1 sec(s) 731 ms

Total Warnings: 23
Total Errors: 0

No. of SeqIDs Defined: 24

Actual SeqID Count: 24

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Input Set:

Output Set:

Started: 2008-05-30 13:46:50.561 **Finished:** 2008-05-30 13:46:52.292

Elapsed: 0 hr(s) 0 min(s) 1 sec(s) 731 ms

Total Warnings: 23

Total Errors: 0

No. of SeqIDs Defined: 24

Actual SeqID Count: 24

Error code Error Description

This error has occured more than 20 times, will not be displayed

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		20					23					50			
Glu G	ly Pro	Glu	Pro	Trp	Pro	Gly	Gly	Pro	Asp	Pro	Asp	Val	Pro	Gly	
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	01	70 71 -	O									110	Pro	ASD	
	sp Glu 50	Ala	Ser	Ser	A1a 55	Cys	ser	IIII	Азр	60	vai			1-	
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					55					60					
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Pro G	50	Glu	Pro	Glu 70	55 Arg	Lys	Arg	Lys	Lys 75	60 Gly	Pro	Ala	Pro	Lys 80	
Pro G	50 lu Glu	Glu	Pro	Glu 70	55 Arg	Lys	Arg	Lys	Lys 75	60 Gly	Pro	Ala	Pro	Lys 80	
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Pro G 65 Met L	50 lu Glu	Glu	Pro Glu 85	Glu 70 Leu	55 Arg Cys	Lys Arg	Arg Val	Lys Cys 90	Lys 75 Gly	60 Gly Asp	Pro Lys	Ala Ala	Pro Ser 95	Lys 80 Gly	

Arg Ser Val Val Arg Gly Gly Ala Arg Arg Tyr Ala Cys Arg Gly Gly
115 120 125

Gly	Thr 130	Cys	Gln	Met	Asp	Ala 135	Phe	Met	Arg	Arg	Lys 140	Cys	Gln	Gln	Cys
Arg 145	Leu	Arg	Lys	Суз	Lys 150	Glu	Ala	Gly	Met	Arg 155	Glu	Gln	Суз	Val	Leu 160
Ser	Glu	Glu	Gln	Ile 165	Arg	Lys	Lys	Lys	Ile 170	Arg	Lys	Gln	Gln	Gln 175	Gln
Glu	Ser	Gln	Ser 180	Gln	Ser	Gln	Ser	Pro 185	Val	Gly	Pro	Gln	Gly 190	Ser	Ser
Ser	Ser	Ala 195	Ser	Gly	Pro	Gly	Ala 200	Ser	Pro	Gly	Gly	Ser 205	Glu	Ala	Gly
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Glu 225	Leu	Met	Ile	Gln	Gln 230	Leu	Val	Ala	Ala	Gln 235	Leu	Gln	Суз	Asn	Lys 240
Arg	Ser	Phe	Ser	Asp 245	Gln	Pro	Lys	Val	Thr 250	Pro	Trp	Pro	Leu	Gly 255	Ala
Asp	Pro	Gln	Ser 260	Arg	Asp	Ala	Arg	Gln 265	Gln	Arg	Phe	Ala	His 270	Phe	Thr
Glu	Leu	Ala 275	Ile	Ile	Ser	Val	Gln 280	Glu	Ile	Val	Asp	Phe 285	Ala	Lys	Gln
Val	Pro 290	Gly	Phe	Leu	Gln	Leu 295	Gly	Arg	Glu	Asp	Gln 300	Ile	Ala	Leu	Leu
Lys 305	Ala	Ser	Thr	Ile	Glu 310	Ile	Met	Leu	Leu	Glu 315	Thr	Ala	Arg	Arg	Tyr 320
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Lys	Asp	Asp	Phe 340	His	Arg	Ala	Gly	Leu 345	Gln	Val	Glu	Phe	Ile 350	Asn	Pro
Ile	Phe	Glu 355	Phe	Ser	Arg	Ala	Met 360	Arg	Arg	Leu	Gly	Leu 365	Asp	Asp	Ala
Glu	Tyr 370	Ala	Leu	Leu	Ile	Ala 375	Ile	Asn	Ile	Phe	Ser 380	Ala	Asp	Arg	Pro
Asn 385	Val	Gln	Glu	Pro	Gly 390	Arg	Val	Glu	Ala	Leu 395	Gln	Gln	Pro	Tyr	Val 400
Glu	Ala	Leu	Leu	Ser 405	Tyr	Thr	Arg	Ile	Lys 410	Arg	Pro	Gln	Asp	Gln 415	Leu
Arg	Phe	Pro	Arg 420	Met	Leu	Met	Lys	Leu 425	Val	Ser	Leu	Arg	Thr 430	Leu	Ser

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Glu Ala Leu Leu Ser Tyr Thr Arg Ile Lys Arg Pro Gln Asp Gln Leu

205

200

195

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Pro Lys Val Thr Pro Trp Pro
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            20
Gly Phe Leu Gln Leu Gly Arg Glu Asp Gln Ile Ala Leu Leu Lys Ala
        35
                             40
                                                 45
Ser Thr Ile Glu Ile Met Leu Leu Glu Thr Ala Arg Arg Tyr Asn His
     50
                         55
Glu Thr Glu Cys Ile Thr Phe Leu Lys Asp Phe Thr Tyr Ser Lys Asp
                     70
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Asp Phe His Arg Ala Gly Leu Gln Val Glu Phe Ile Asn Pro Ile Phe

90 95

Glu Phe Ser Arg Ala Met Arg Arg Leu Gly Leu Asp Asp Ala Glu Tyr
100 105 110

Ala Leu Leu Ile Ala Ile Asn Ile Phe Ser Ala Asp Arg Pro Asn Val 115 120 125

Gln Glu Pro Gly Arg Val Glu Ala Leu Gln Gln Pro Tyr Val Glu Ala 130 $$135\,$

Leu Leu Ser Tyr Thr Arg Ile Lys Arg Pro Gln Asp Gln Leu Arg Phe
145 150 155 160

Pro Arg Met Leu Met Lys Leu Val Ser Leu Arg Thr Leu Ser Ser Val 165 170 175

His Ser Glu Gln Val Phe Ala Leu Arg Leu Gln Asp Lys Lys Leu Pro 180 185 190

Pro Leu Leu Ser Glu Ile Trp Asp Val Ala 195 200

<210> 6

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Leu Thr Ala Ala Gln Glu Leu Met Ile Gln Gln Leu Val Ala Ala Gln $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$

Leu Gln Cys Asn Lys Arg Ser Phe Ser Asp Gln Pro Lys Val Thr Pro
20 25 30

Trp Pro Leu Gly Ala Asp Pro Gln Ser Ala Asp Ala Arg Gln Gln Arg
35 40 45

Phe Ala His Phe Thr Glu Leu Ala Ile Ile Ser Val Gln Glu Ile Val 50 60

Asp Phe Ala Lys Gln Val Pro Gly Phe Leu Gln Leu Gly Arg Glu Asp 65 70 75 80

Gln Ile Ala Leu Leu Lys Ala Ser Thr Ile Glu Ile Met Leu Leu Glu
85 90 95

Thr Ala Arg Arg Tyr Asn His Glu Thr Glu Cys Ile Thr Phe Leu Lys
100 105 110

Asp Phe Thr Tyr Ser Lys Asp Asp Phe His Arg Ala Gly Leu Gln Val 115 120 125

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Glu Phe Ile Asn Pro Ile Phe Glu Phe Ser Arg Ala Met Arg Arg Leu
   130
                       135
                                          140
Gly Leu Asp Asp Ala Glu Tyr Ala Leu Leu Ile Ala Ile Asn Ile Phe
145
                  150
                                      155
                                                          160
Ser Ala Asp Arg Pro Asn Val Gln Glu Pro Gly Arg Val Glu Ala Leu
               165
                                   170
Gln Gln Pro Tyr Val Glu Ala Leu Leu Ser Tyr Thr Arg Ile Lys Arg
           180
                               185
Pro Gln Asp Gln Leu Arg Phe Pro Arg Met Leu Met Lys Leu Val Ser
                           200
                                               205
Leu Arg Thr Leu Ser Ser Val His Ser Glu Gln Val Phe Ala Leu Arg
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               215
                                        220
Leu Gln Asp Lys Lys Leu Pro Pro Leu Leu Ser Glu Ile Trp Asp Val
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                  230
                                     235
                                                          240
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                                  10
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Trp
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1 5 10 15

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20 25 30

Gly Arg Glu Asp Gln Ile Ala Leu Leu Lys Ala Ser Thr Ile Glu Ile 35 40 45

Met Leu Leu Glu Thr Ala Arg Arg Tyr Asn His Glu Thr Glu Cys Ile
50 60

Thr Phe Leu Lys Asp Phe Thr Tyr Ser Lys Asp Asp Phe His Arg Ala 65 70 75 80

Gly Leu Gln Val Glu Phe Ile Asn Pro Ile Phe Glu Phe Ser Arg Ala 85 90 95

Met Arg Arg Leu Gly Leu Asp Asp Ala Glu Tyr Ala Leu Leu Ile Ala 100 105 110

Ile Asn Ile Phe Ser Ala Asp Arg Pro Asn Val Gln Glu Pro Gly Arg 115 120 125

Val Glu Ala Leu Gln Gln Pro Tyr Val Glu Ala Leu Leu Ser Tyr Thr 130 135 140

Arg Ile Lys Arg Pro Gln Asp Gln Leu Arg Phe Pro Arg Met Leu Met 145 150 155 160

Lys Leu Val Ser Leu Arg Thr Leu Ser Ser Val His Ser Glu Gln 165 170 175

<210> 9

<211> 25

<212> PRT

<213> Artificial Sequence

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Leu Thr Ala Ala Gln Glu Leu Met Ile Gln Gln Leu Val Ala Ala Gln $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$

Leu Gln Cys Asn Lys Arg Ser Phe Ser
20 25

<210> 10

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Lys Val Thr Pro Trp Pro Leu
1 5

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<212> PRT

<213> Artificial Sequence

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Ala Arg Gln Gln Arg Phe Ala His Phe Thr Glu Leu Ala Ile Ile Ser 1 5 10 15

Val Gln Glu Ile Val Asp Phe Ala Lys Gln Val Pro Gly Phe Leu Gln
20 25 30

Leu Gly Arg Glu Asp Gln Ile Ala Leu Leu Lys Ala Ser Thr Ile Glu 35 40 45

Ile Met Leu Leu Glu Thr Ala Arg Arg Tyr Asn His Glu Thr Glu Cys
50 55 60

Ile Thr Phe Leu Lys Asp Phe Thr Tyr Ser Lys Asp Asp Phe His Arg 65 70 75 80

Ala Gly Leu Gln Val Glu Phe Ile Asn Pro Ile Phe Glu Phe Ser Arg 85 90 95

Ala Met Arg Arg Leu Gly Leu Asp Asp Ala Glu Tyr Ala Leu Leu Ile 100 105 110

Ala Ile Asn Ile Phe Ser Ala Asp Arg Pro Asn Val Gln Glu Pro Gly
115 120 125

Arg Val Glu Ala Leu Gln Gln Pro Tyr Val Glu Ala Leu Leu Ser Tyr 130 $$135\$

Met Lys Leu Val Ser Leu Arg Thr Leu Ser Ser Val His Ser Glu Glu 165 170 175

Val Phe Ala Leu Arg Leu

180

<210> 12

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Leu Gln Cys Asn Lys Arg Ser Phe Ser Asp Gln Pro Lys Val Thr Pro
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Trp Pro
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Ile Ser Val Gln Glu Ile Val Asp Phe Ala Lys Gln Val Pro Gly Phe
             20
Leu Gln Leu Gly Arg Glu Asp Gln Ile Ala Leu Leu Lys Ala Ser Thr
        35
                            40
                                                45
Ile Glu Ile Met Leu Leu Glu Thr Ala Arg Arg Tyr Asn His Glu Thr
     50
Glu Cys Ile Thr Phe Leu Lys Asp Phe Thr Tyr Ser Lys Asp Asp Phe
                     70
                                         75
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His Arg Ala Gly Leu Gln Val Glu Phe Ile Asn Pro Ile Phe Glu Phe

 85
 90
 95

Ser Arg Ala Met Arg Arg Leu Gly Leu Asp Asp Ala Glu Tyr Ala Leu 100 105 110

Leu Ile Ala Ile Asn Ile Phe Ser Ala Asp Arg Pro Asn Val Glu 115 120 125

Met Leu Met Lys Leu Val Ser Leu Arg Thr Leu Ser Ser V